

REMARKS/ARGUMENTS

Claims 1-14 and 21-22 are pending in the application. By this response claims 1, 3, 7, 21, and 22 have been amended and claim 2 has been canceled. Claim 2 has been incorporated into claim 1, claims 3, 21, and 22 have been amended to correct their dependency and claim 7 was amended to fix a typographical error. Therefore, no new matter has been added and applicant respectfully requests allowance of the claims.

Interview Summary

On October 2, 2008, the undersigned conducted a telephonic interview with the Examiner. During the interview, claim 1 was discussed, with particular attention paid to the liner element. The Examiner stated that he was reading the liner as broadly as possible and that the Applicant would have to further define the liner.

Remarks regarding 35 U.S.C. § 102

Claims 1-3 stand rejected under 35 USC § 102(b) as allegedly being anticipated by Nii et al. (USP 4,938,611). Applicant respectfully traverses the rejection.

As amended, claim 1 recites:

a base having a bore hole;
a liner secured within the bore hole, wherein the liner includes a
bottom having a hole formed there through;

The Examiner states that figure 11 of Nii shows this element. The Examiner also states that the liner of the pending application is equivalent to the bearing 6 of Nii and that the base having a bore hole of the pending application is equivalent to the bearing housing 14. Applicant respectfully asserts that neither of these elements as disclosed by Nii are equivalent to the elements recited in the pending claims. Additionally, the Examiner does not point specifically to which aspect of figure 11 of Nii he considers to be the liner bottom having a hole formed there

through. Although figure 11 does show holes 29d and 30d in disk-shaped thrust bearing 8d, thrust bearing 8d is not a part of bearing 6d (which the examiner contends to be the liner). In fact, these two elements are separated by the bearing fluid. Furthermore, claim 1 recites that the liner (with a bottom having a hole) is secured within the bore hole in the base. Even if the bearing housing 14 of Nii is considered equivalent to the base of the pending application and holes 29d and 30d are in the bottom of the liner, as suggested by the examiner, thrust bearing 8d (containing holes 29d and 30d) is outside and below bearing housing 14 (although Applicant would disagree). Thus, these disclosures in Nii cannot read on the claimed element of “a liner secured within the bearing hole,” as recited in claim 1. Since Nii does not disclose all of the elements of claim 1, Applicant respectfully requests withdrawal of the rejection.

Remarks regarding 35 U.S.C. § 103

A. Claims 1, 2, 3, 6, 9-14, 21, and 22 stand rejected under 35 U.S.C. § 103 (a) as allegedly obvious over Usui (U.S. Patent No. 5,924,798) in view of Nii. The Office Action alleges that it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Usui to include a fluid recirculation passage as described Nii for purposes of recirculating fluid from one end of the bearing to the other and discharging heat from the fluid. Furthermore, the Examiner relies on Nii to show the liner bottom having a hole there through, as described above. Applicant respectfully traverses the rejection.

As argued above with respect to the § 102 rejection, amended, claim 1 recites:

a base having a bore hole;
a liner secured within the bore hole, wherein the liner includes a
bottom having a hole formed there through;

Neither Usui, Nii, nor the combination of the two references discloses or even suggests a liner having a bottom. Applicant asserts that the elements referred to as the liner in both references (namely sleeve 5b of Usui and bearing 6 of Nii) are tubular elements that have no bottom.

Furthermore, Applicant respectfully reasserts that Nii does not teach an equivalent liner since the elements of Nii cannot read on the claimed element of “a liner secured within the bearing hole,” as recited in claim 1 as argued above. Since the combination of Usui and Nii do not teach all of the elements of claim 1, Applicant respectfully requests withdrawal of the rejection.

B. Claims 1-3 and 6-8 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Tanaka (U.S. 2001/0022869) in view of Nii. The examiner contends that Tanaka discloses all of the elements of claim 1 except for a recirculation channel disposed outside the liner. However, the examiner states that Nii cures this deficiency. Furthermore, the Examiner relies on Nii to show the liner bottom having a hole there through, as described above. Applicant respectfully traverses the rejection.

As argued above with respect to the § 102 rejection, amended, claim 1 recites:

a base having a bore hole;
a liner secured within the bore hole, wherein the liner includes a
bottom having a hole formed there through;

Neither Tanaka, Nii, nor the combination of the two references discloses or even suggests a liner having a bottom. Applicant asserts that the elements referred to as the liner in both references (namely sleeve 12 of Tanaka and bearing 6 of Nii) are tubular elements that have no bottom. Furthermore, Applicant respectfully reasserts that Nii does not teach an equivalent liner since the elements of Nii cannot read on the claimed element of “a liner secured within the bearing hole,” as recited in claim 1 as argued above. Since the combination of Tanaka and Nii do not teach all of the elements of claim 1, Applicant respectfully requests withdrawal of the rejection.

C. Claims 4 and 5 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Tanaka in view of Nii as applied to claims 1-3, further in view of Titcomb (U.S. Patent 5,516,212). The Office Action alleges that it would have been obvious to incorporate a capillary

seal between the liner and a tapered section of the shaft taught by Titcomb into the device of Tanaka, in the reliance on the motivation to seal the lubricating fluid between the bearing surfaces. This rejection is respectfully traversed for the following reasons.

Although Tanaka and Nii are more discussed above, neither teach the claim elements of a “a liner secured within the bore hole, wherein the liner includes a bottom having a hole formed there through.”

Titcomb (U.S. Patent 5,516,212) provides no suggestion of these claim elements to one skilled in the art and, thus, fails to cure the deficiencies of Tanaka in view of Nii to include “a liner secured within the bore hole, wherein the liner includes a bottom having a hole formed there through.”

Accordingly, for at least the above reasons, Tanaka in view of Nii and in further in view of Titcomb fails to disclose or suggest each and every feature of claim 1, and those claims depending therefrom. Therefore, Applicant respectfully requests withdrawal of the rejection.

CONCLUSION

In view of the foregoing, Applicant respectfully submits that claims 1, 3-14, 21, and 22 define subject matter that is patentable over the prior art and in immediate condition for allowance. Further and favorable reconsideration of this application and the issuance of a Notice of Allowance are requested. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 14-1437. Please credit any excess fees to such deposit account.

Respectfully submitted,
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